

In the Claims:

Claims 1-17 (canceled).

Claim 18 (currently amended): A structure comprising:

a substrate having a top surface for receiving a chip, said chip having at least one device electrode;

a printed circuit board attached to a bottom surface of said substrate;

at least one signal via in said substrate;

at least one bond pad abutting said at least one signal via, said at least one bond pad providing an electrical connection between ~~a device~~ said at least one device electrode of said chip and said printed circuit board;

a plurality of separate thermally conductive vias in said substrate, each of said plurality of separate thermally conductive vias being coupled to a heat spreader, said heat spreader being directly attached to said bottom surface of said substrate.

Claim 19 (original): The structure of claim 18 wherein said chip is a semiconductor chip.

Claim 20 (original): The structure of claim 18 wherein said substrate comprises organic material.

Claim 21 (original): The structure of claim 20 wherein said organic material is selected from the group consisting of polytetrafluoroethylene material and an FR4 based laminate material.

Claim 22 (original): The structure of claim 18 wherein said substrate comprises a ceramic material.

Claim 23 (currently amended): The structure of claim 18 wherein said at least one signal via is coupled to said at least one bond pad without utilizing a trace ~~provides an electrical connection between a bond pad and said printed circuit board, wherein said bond pad is electrically connected to said device electrode.~~

Claim 24 (currently amended): The structure of claim 23 wherein said at least one signal via runs from said top surface of said substrate to said bottom surface of said substrate ~~abuts said bond pad.~~

Claim 25 (original): The structure of claim 23 wherein said bond pad is electrically connected to said device electrode by a bonding wire.

Claim 26 (currently amended): The structure of claim 18 wherein each of said at least one signal via provides an electrical connection between said device electrode and a land, said land being electrically connected to said printed circuit board.

Claim 27 (currently amended): The structure of claim 26 wherein said at least one signal via ~~abuts~~ is coupled to said land.

Claim 28 (currently amended): The structure of claim 18 wherein each of said at least one signal via provides an electrical connection between ~~a bond pad~~ one of said at least one bond pad and a land, ~~wherein said bond pad is electrically connected to said device electrode, and~~ wherein said land is electrically connected to said printed circuit board.

Claim 29 (currently amended): The structure of claim 28 wherein said each of said at least one signal via ~~abuts said bond pad and~~ is coupled to said land.

Claim 30 (original): The structure of claim 28 wherein said bond pad is electrically connected to said device electrode by a bonding wire.

Claim 31 (original): The structure of claim 29 wherein said bond pad is electrically connected to said device electrode by a bonding wire.

Claim 32 (previously presented): The structure of claim 18 wherein said at least one signal via comprises copper.

Claim 33 (previously presented): The structure of claim 18 wherein said at least one signal via comprises a thermally conductive material.

Claims 34-57 (canceled).

Claim 58 (currently amended): A structure comprising:

- a substrate having a top surface and a bottom surface;
- a semiconductor chip attached to said top surface of said substrate, said semiconductor chip having a plurality of device electrodes;
- a heat spreader directly attached to said bottom surface of said substrate;
- a first plurality of separate thermally conductive vias in said substrate, said first plurality of separate thermally conductive vias providing a connection between said semiconductor chip and said heat spreader;
- ~~said first plurality of separate thermally conductive vias providing a connection between said semiconductor chip and said heat spreader.~~

a plurality of bond pads and a second plurality of signal vias arranged such that each one of said plurality of bond pads abuts a separate one of said second plurality of signal vias.

Claim 59 (original): The structure of claim 58 wherein said heat spreader is attached to a printed circuit board.

Claim 60 (currently amended): The structure of claim 59 wherein ~~a second~~ said second plurality of signal vias is located in said substrate to provide connections between ~~a~~ between said plurality of device electrodes of said semiconductor chip and said printed circuit board.

Claim 61 (previously presented): The structure of claim 58 wherein said first plurality of separate thermally conductive vias provide an electrical connection between said semiconductor chip and said heat spreader.

Claim 62 (previously presented): The structure of claim 58 wherein said first plurality of separate thermally conductive vias provide a thermal connection between said semiconductor chip and said heat spreader.

Claim 63 (currently amended): The structure of claim 60 wherein said second plurality of signal vias provide electrical connections ~~between a~~ between said plurality of bond pads and said printed circuit board, wherein each of said plurality of bond pads is electrically connected to a respective one of said plurality of device electrodes.

Claim 64 (previously presented): The structure of claim 60 wherein said second plurality of signal vias provide electrical connections between each one of said plurality of device electrodes and a respective one of a plurality of lands, said plurality of lands being electrically connected to said printed circuit board.

Claim 65 (previously presented): The structure of claim 58 wherein said first plurality of separate thermally conductive vias comprise copper.

Claim 66 (previously presented): The structure of claim 60 wherein said second plurality of signal vias comprise copper.